April 7, 2003

The Honorable Rob Simmons Chairman Subcommittee on Health House Committee on Veterans Affairs United States House of Representatives 338 Cannon Building House Office Building Washington, D.C. 20515

Dear Representative Simmons:

Thank you for holding an oversight hearing on biomedical research programs for the Department of Veterans Affairs, on Thursday, April 10, 2003. Although I will be unable to testify at the hearing, I wanted to share my experience of contributions made by the VA to medical research.

Last week, media attention throughout the world focused on my recent surgery to have electrodes implanted to assist and strengthen my breathing. Whenever such medical victories are reported, it seems important to appreciate that they do not come easily — either for the patient or for the clinicians. In the case of my surgery, the foundation for this procedure was laid back in the 1970's and nurtured over the years by federal research programs whose job it is to make investments in solid fundamental ideas today that promise clinical translation tomorrow.

The diaphragm pacing system is one of many research triumphs that have resulted from the often overlooked Department of Veterans Affairs Rehabilitation Research Program, collaborating with academic partners such as Case Western Reserve University School of Medicine and other Federal agencies. The VA has taken a leadership role in ensuring the continuity and progression of this research to the benefit of veterans and others with paralysis worldwide. Work of this caliber is a cooperative effort requiring the sustained effort of the researchers, the research participants, the institutions that sponsor the research programs, and the leadership of the federal agencies that provide the necessary vision and resources to achieve success.

The applications of electrical signals to muscles in order to control their function was initially supported as exploratory research by both VA and the National Institutes of Health in the early 1970's. As potential clinical applications emerged from this initial research, VA continued to support development and design of electrodes, surgical tools and methods, and pre-clinical testing to demonstrate the system's human potential. More recently, support has been provided by the Food and Drug Administration's Orphan

Products Division to study the implementation of the system in human subjects. I am fortunate to have been selected as the third participant in this study.

In addition to diaphragm pacing, electrodes have the potential to affect bladder and bowel control, to prevent pressure sores, to support standing and transfer after spinal cord injury, and to improve walking following stroke. VA has funded research in the development of all these applications and provides a model for how clinical care and research can merge to provide a continuum of research that will benefit the healthcare of tomorrow.

Today research investments that began long ago are about to bear fruit. We are on the threshold of a number of clinical trials treating paralysis and spinal cord injuries. The VA system would be an excellent home for clinical trials for patients who have served their country, and most deserved to benefit from our nation's cutting edge research. In addition, the VA has identified standardized best practices and outcome measurements that will be required to translate research to therapies.

By recognizing the contributions of our entire medical research enterprise, we will ensure the future viability of research programs that offer hope to so many.

Thank you very much,

Christopher Reeve